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Term: ((707/200)!.CCLS.)

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Search History

DATE: Thursday, January 24, 2002 [Printable Copy](#) [Create Case](#)

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR</i>			
<u>L59</u>	L58 and rank\$ same data same records	14	<u>L59</u>
<u>L58</u>	L57 and key	969	<u>L58</u>
<u>L57</u>	L56 and data near records	1459	<u>L57</u>
<u>L56</u>	database with manag\$ with system	10221	<u>L56</u>
<i>DB=USPT; PLUR=YES; OP=</i>			
<u>L55</u>	4606002.pn.	1	<u>L55</u>
<u>L54</u>	4677550.pn.	1	<u>L54</u>
<u>L53</u>	4945475.pn.	1	<u>L53</u>
<u>L52</u>	5049881.pn.	1	<u>L52</u>
<u>L51</u>	5058002.pn.	1	<u>L51</u>
<u>L50</u>	5201046.pn.	1	<u>L50</u>
<u>L49</u>	5218696.pn.	1	<u>L49</u>
<u>L48</u>	5237678.pn.	1	<u>L48</u>

<u>L47</u>	5261088.pn.	1	<u>L47</u>
<u>L46</u>	5283894.pn.	1	<u>L46</u>
<u>L45</u>	5379419.pn.	1	<u>L45</u>
<u>L44</u>	5404510.pn.	1	<u>L44</u>
<u>L43</u>	5414704.pn.	1	<u>L43</u>
<u>L42</u>	5475826.pn.	1	<u>L42</u>
<u>L41</u>	5511190.pn.	1	<u>L41</u>

DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR

<u>L40</u>	L39 and page near size	4	<u>L40</u>
<u>L39</u>	L38 and key	107	<u>L39</u>
<u>L38</u>	hash\$ near records	143	<u>L38</u>

DB=USPT; PLUR=YES; OP=

<u>L37</u>	4121286.pn.	1	<u>L37</u>
<u>L36</u>	4215402.pn.	1	<u>L36</u>
<u>L35</u>	4447875.pn.	1	<u>L35</u>
<u>L34</u>	4502118.pn.	1	<u>L34</u>
<u>L33</u>	4716524.pn.	1	<u>L33</u>
<u>L32</u>	4775932.pn.	1	<u>L32</u>

DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR

<u>L31</u>	l13 and garbage near collection	20	<u>L31</u>
<u>L30</u>	L29 and page near size	6	<u>L30</u>
<u>L29</u>	L28 and rank\$	202	<u>L29</u>
<u>L28</u>	L26 and key	1706	<u>L28</u>
<u>L27</u>	L26 and sections	1233	<u>L27</u>
<u>L26</u>	L25 and data with records	2719	<u>L26</u>
<u>L25</u>	database near manag\$	8847	<u>L25</u>

DB=USPT,PGPB; PLUR=YES; OP=OR

<u>L24</u>	(((711/130)!.CCLS.))	155	<u>L24</u>
<u>L23</u>	(((711/129)!.CCLS.))	171	<u>L23</u>
<u>L22</u>	(((711/117)!.CCLS.))	266	<u>L22</u>
<u>L21</u>	(((711/160)!.CCLS.))	109	<u>L21</u>
<u>L20</u>	(((711/113)!.CCLS.))	456	<u>L20</u>
<u>L19</u>	(((711/\$)!.CCLS.))	12581	<u>L19</u>
<u>L18</u>	(((707/\$)!.CCLS.))	12008	<u>L18</u>
<u>L17</u>	(((707/10\$)!.CCLS.))	4658	<u>L17</u>
<u>L16</u>	(((707/3)!.CCLS.))	1551	<u>L16</u>
<u>L15</u>	(((707/103)!.CCLS.))	0	<u>L15</u>
<u>L14</u>	(((707/8)!.CCLS.))	491	<u>L14</u>
<u>L13</u>	((707/200)!.CCLS.))	762	<u>L13</u>

DB=USPT; PLUR=YES; OP=

L12 3938097.pn.1 L12L11 4008460.pn.1 L11*DB=USPT,PGPB; PLUR=YES; OP=OR*L10 5121495.pn.1 L10L9 4996663.pn.1 L9L8 5717893.pn.1 L8L7 5706506.pn.1 L7L6 5493668.pn.1 L6L5 5317731.pn.1 L5L4 5235701.pn.1 L4L3 4574346.pn.1 L3L2 4422145.pn.1 L2L1 4186438.pn.1 L1

END OF SEARCH HISTORY

WEST

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L40: Entry 3 of 4

File: USPT

Nov 11, 1997

US-PAT-NO: 5687361

DOCUMENT-IDENTIFIER: US 5687361 A

TITLE: System for managing and accessing a dynamically expanding computer database

DATE-ISSUED: November 11, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sarkar; Shyam Sundar	St. Paul	MN		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Unisys Corporation	Blue Bell	PA			02

APPL-NO: 8/ 387192 [PALM]

DATE FILED: February 13, 1995

INT-CL: [6] G06 F 17/30

US-CL-ISSUED: 395/601; 395/611

US-CL-CURRENT: 707/1

FIELD-OF-SEARCH: 395/600, 395/601, 395/611

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

Search ALL

	PAT-NO	ISSUE DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>4606002</u>	August 1986	Waisman et al.	364/200
<input type="checkbox"/>	<u>4677550</u>	June 1987	Ferguson	364/300
<input type="checkbox"/>	<u>4945475</u>	July 1990	Bruffey et al.	364/200
<input type="checkbox"/>	<u>5049881</u>	September 1991	Gibson et al.	341/95
<input type="checkbox"/>	<u>5058002</u>	October 1991	Nakamura et al.	364/200
<input type="checkbox"/>	<u>5201046</u>	April 1993	Goldberg et al.	395/600
<input type="checkbox"/>	<u>5218696</u>	June 1993	Baird et al.	395/600
<input type="checkbox"/>	<u>5237678</u>	August 1993	Kuechler et al.	395/600
<input type="checkbox"/>	<u>5261088</u>	November 1993	Baird et al.	395/600
<input type="checkbox"/>	<u>5283894</u>	February 1994	Deran	395/600
<input type="checkbox"/>	<u>5379419</u>	January 1995	Hefferman et al.	395/600
<input type="checkbox"/>	<u>5404510</u>	April 1995	Smith et al.	395/600
<input type="checkbox"/>	<u>5414704</u>	May 1995	Spinney	370/60
<input type="checkbox"/>	<u>5475826</u>	December 1995	Fischer	395/182.04
<input type="checkbox"/>	<u>5511190</u>	April 1996	Sharma et al.	395/600

OTHER PUBLICATIONS

Reingold et al., "Data Structure in Pascal" (Little, Brown computer systems series) pp. 300-490 Jan. 1986.

C.J. Date "An introduction to Database Systems 6th ed" (The Systems programming series) pp. 713-746 Aug. 1995.

Witold Litwin "Virtual Hashing: A Dynamically Changing Hashing, " P (517-523) Sep. 1978.

Witold Litwin "Virtual Hashing: A New Tool For File and Table Addressing" (212-223) Sep. 1980.

ART-UNIT: 237

PRIMARY-EXAMINER: Black; Thomas G.

ASSISTANT-EXAMINER: Corrielus; Jean M.

ATTY-AGENT-FIRM: Schwegman, Lundberg, Woessner & Kluth, P.A.

ABSTRACT:

A database management and access system is described which provides dynamic key space allocation to one or more pages of the database as records are added to the database. The database management and access system includes a page access subsystem and a record access subsystem to facilitate record access by incorporating an order preserving, linear hashing function for cluster preservation and using empty page flags and overflow page flags to decrease range query time latencies of the database.

10 Claims, 17 Drawing figures

WEST**End of Result Set**

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L1: Entry 1 of 1

File: USPT

Jan 29, 1980

US-PAT-NO: 4186438

DOCUMENT-IDENTIFIER: US 4186438 A

TITLE: Interactive enquiry system

DATE-ISSUED: January 29, 1980

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Benson; Paul H.	Chandlers Ford			GB2
Kingdom-Hockings; Michael L.	Chandlers Ford			GB2
Middleton; Brian H.	Winchester			GB2
Pinnell; Martin C.	Winchester			GB2
Robinson; Thomas E.	Romsey			GB2
Sheeler; Richard E.	Winchester			GB2
Simmons; John	Chandlers Ford			GB2

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE	CODE
International Business Machines Corporation	Armonk NY					02

APPL-NO: 5/ 778181 [PALM]

DATE FILED: March 16, 1977

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
GB	10813/76	March 17, 1976

INT-CL: [2] G06F 3/04, G06F 7/06, G06F 13/06

US-CL-ISSUED: 364/200

US-CL-CURRENT: 711/113; 711/136

FIELD-OF-SEARCH: 364/2MSFile, 364/9MSFile

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

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	PAT-NO	ISSU DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>3394246</u>	April 1963	Goldman	235/61.7
<input type="checkbox"/>	<u>3564509</u>	February 1971	Perkins et al.	364/200
<input type="checkbox"/>	<u>3569938</u>	March 1971	Eden et al.	364/200
<input type="checkbox"/>	<u>3686637</u>	August 1972	Zachar et al.	364/200
<input type="checkbox"/>	<u>3696335</u>	October 1972	Lemelson	340/149A
<input type="checkbox"/>	<u>3771135</u>	November 1973	Huettner et al.	364/200
<input type="checkbox"/>	<u>3810105</u>	May 1974	England	364/200
<input type="checkbox"/>	<u>3909798</u>	September 1975	Wallach et al.	364/200
<input type="checkbox"/>	<u>3938097</u>	February 1976	Niguette	364/200
<input type="checkbox"/>	<u>4008460</u>	February 1977	Bryant et al.	364/200

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
1354827	May 1974	GBX	364/200
1437883	June 1976	GBX	364/200

ART-UNIT: 237

PRIMARY-EXAMINER: Nusbaum; Mark E.

ATTY-AGENT-FIRM: Hesse; Karl O.

ABSTRACT:

Described is an interactive enquiry system in which a complete data base is contained at a host computer. Local terminal sub-systems are remotely connected to the host with each local sub-system containing a local data base. Each local data base is dynamically maintained so that the most frequently used pages are retained in local storage. If storage space needs to be created, the least frequently used pages are discarded from the local data base.

11 Claims, 28 Drawing figures

WEST**End of Result Set**☐ **Generate Collection** **Print**

L2: Entry 1 of 1

File: USPT

Dec 20, 1983

US-PAT-NO: 4422145

DOCUMENT-IDENTIFIER: US 4422145 A

TITLE: Thrashing reduction in demand accessing of a data base through an LRU paging buffer pool

DATE-ISSUED: December 20, 1983

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sacco; Giovanni M.	Turin			ITX
Schkolnick; Mario	Monte Sereno	CA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE	CODE
International Business Machines Corporation	Armonk NY					02

APPL-NO: 6/ 334272 [PALM]

DATE FILED: October 26, 1981

PCT-DATA:

APPL-NO	DATE-FILED	PUB-NO	PUB-DATE	371-DATE	102 (E) -DATE
PCT/US81/01109	August 18, 1981	WO83/00758	Mar 3, 1983	Oct 26, 1981	Oct 26, 1981

INT-CL: [3] G11C 9/06

US-CL-ISSUED: 364/300; 364/200

US-CL-CURRENT: 711/160

FIELD-OF-SEARCH: 364/200, 364/300, 364/900

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

☐ **Search Selected** **Search ALL**

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>235806</u>	February 1981	Mattson et al.	
<input type="checkbox"/>	<u>3806883</u>	April 1974	Weisbecker	364/200
<input type="checkbox"/>	<u>3958228</u>	May 1976	Coombes et al.	364/200
<input type="checkbox"/>	<u>4035778</u>	July 1977	Ghanem	364/200
<input type="checkbox"/>	<u>4059850</u>	November 1977	Van Eck et al.	364/200
<input type="checkbox"/>	<u>4168541</u>	September 1979	De Karske	364/200

OTHER PUBLICATIONS

Lang, et al., "Data Base Buffer Paging in Virtual Storage Systems", ACM Transactions on Data Base Systems, Dec. 1977, pp. 339-351.
Selinger, et al., "Access Path Selection in a Relational Data Base", Proc. 1979, Sigmod Conf. of ACM, pp. 22-34.
IBM General Information and Concepts and Installation Manuals, GH24-5012 and GH24-5013, Jan. 1981.
Denning, "The Working Set Model for Programmed Behavior", Communication of ACM, vol. 11, May 1968, pp. 323-333.
Shaw, "The Logical Design of Operating Systems", 1974, pp. 138-144.
Coffman, "Operating Systems Theory", Prentice-Hall, pp. 298-299, 1973.

ART-UNIT: 232

PRIMARY-EXAMINER: Zache; Raulfe B.

ATTY-AGENT-FIRM: Brodie; R. Bruce

ABSTRACT:

A CPU implementable method for minimizing thrashing among concurrent processes demand page accessing a data base through an LRU page organized buffer pool. There is ascertained the set of pages over which there is looping access behavior for the prospectively executing concurrent processes. This parameter, as determined for each task, is passed to the storage accessing component which partitions the buffer into LRU stacks and dynamically adjusts the stack to this predicted parameter size.

9 Claims, 4 Drawing figures

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Terms	Documents
5842212.pn.	1

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5842212.pn.

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L13: Entry 1 of 1

File: USPT

Nov 24, 1998

US-PAT-NO: 5842207

DOCUMENT-IDENTIFIER: US 5842207 A

TITLE: Method for storing records of a distributed database by plural processors to provide a host processor with sorted records belonging to one of a plurality of key sections

DATE-ISSUED: November 24, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fujiwara; Shinji	Kokubunji			JPX
Shintani; Yooichi	Machida			JPX
Nagasaka; Mitsuru	Kodaira			JPX
Hamanaka; Naoki	Tokyo			JPX
Suzuki; Mikiko	Kunitachi			JPX

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Hitachi, Ltd.	Tokyo			JPX	03

APPL-NO: 7/ 911617 [PALM]

DATE FILED: July 10, 1992

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
JP	3-169661	July 10, 1991

INT-CL: [6] G06 F 17/30

US-CL-ISSUED: 707/7; 707/10

US-CL-CURRENT: 707/7; 707/10

FIELD-OF-SEARCH: 395/600, 395/650, 364/246.3, 364/252.3, 364/252.4, 364/280.6, 364/281, 364/281.3, 364/281.4, 364/281.6, 364/282.1, 364/282.3, 364/282.4

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

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	PAT-NO	ISSUE DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>3611316</u>	October 1971	Woodrum	395/800
<input type="checkbox"/>	<u>4575798</u>	March 1986	Lindstrom et al.	123/643
<input type="checkbox"/>	<u>4760526</u>	July 1988	Takeda et al.	707/7
<input type="checkbox"/>	<u>4817050</u>	March 1989	Komatsu et al.	707/10
<input type="checkbox"/>	<u>5058002</u>	October 1991	Nakamura et al.	707/1
<input type="checkbox"/>	<u>5146590</u>	September 1992	Lorie et al.	707/7
<input type="checkbox"/>	<u>5179699</u>	January 1993	Iyer et al.	707/7
<input type="checkbox"/>	<u>5230047</u>	July 1993	Frey, Jr. et al.	395/182.02

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0127753	December 1984	EPX	
0377993	July 1990	EPX	
A-2-118756	0000	JPX	
A-2-228730	0000	JPX	

OTHER PUBLICATIONS

Ullman, translated by Kunii et al., "Principle of Database System", pp. 59-61.
S. Sekiguchi et al., "Methods in Parallel Scientific Computation", Information Processing, vol. 27, No. 9, Sep. 1986, pp.985-993.
DeWitt et al., "Parallel Sorting on a Shared Nothing Architecture Using Probabilistic Splitting", 4-6 Dec. 1991, pp. 280-291, IEEE Comp. Soc. Press.
Haishoud, et al., "Critical Issues in the Design of a Fault-Tolerant Multiprocessor Database Server".

ART-UNIT: 271

PRIMARY-EXAMINER: Black; Thomas G.

ASSISTANT-EXAMINER: Choules; Jack M.

ATTY-AGENT-FIRM: Antonelli, Terry, Stout & Kraus

ABSTRACT:

A sorting method used with a distributed database having a plurality of first processors for holding partial records of a database that is divided into a plurality of portions and a host processor for accessing to each of the first processors. The method comprises the steps of: assigning a plurality of sections into which the distribution range of key values of records of the database is partitioned to a plurality of second processors in the first processors, and information for representing storage positions of the records to the second processors to which the sections of the key values, to which the records belong, are assigned; and sorting the plurality of key values, which have been received, in the second processors to produce key tables in which the information for representing the storage positions of the records which has been received is registered together with the sorted key values, as the sorting result.

4 Claims, 18 Drawing figures

WEST

End of Result Set

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L19: Entry 1 of 1

File: USPT

Dec 12, 1995

US-PAT-NO: 5475826

DOCUMENT-IDENTIFIER: US 5475826 A

TITLE: Method for protecting a volatile file using a single hash

DATE-ISSUED: December 12, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fischer; Addison M.	Naples	FL	33942	

APPL-NO: 8/ 154520 [PALM]

DATE FILED: November 19, 1993

INT-CL: [6] G06 F 12/00, G06 F 3/023

US-CL-ISSUED: 395/182.04; 395/421.09, 395/421.1, 395/600, 395/421.06, 364/DIG.1, 364/246.6, 364/252.5, 364/255.1

US-CL-CURRENT: 707/1; 711/216, 711/219, 711/220, 714/6

FIELD-OF-SEARCH: 395/600, 395/400, 395/421.06, 395/421.09, 395/421.10, 364/DIG.1

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>4290105</u>	September 1981	Cichelli et al.	364/200
<input type="checkbox"/>	<u>4352952</u>	October 1982	Boone et al.	178/22.09
<input type="checkbox"/>	<u>4588991</u>	May 1991	Atalla	340/825.31
<input type="checkbox"/>	<u>5182799</u>	January 1993	Tamura et al.	395/400
<input type="checkbox"/>	<u>5199073</u>	March 1993	Scott	380/49
<input type="checkbox"/>	<u>5204966</u>	April 1993	Wittenberg et al.	395/800
<input type="checkbox"/>	<u>5208853</u>	May 1993	Armbruster et al.	380/4
<input type="checkbox"/>	<u>5267313</u>	November 1993	Hirata	380/21
<input type="checkbox"/>	<u>5297208</u>	March 1994	Schlaflly et al.	380/49
<input type="checkbox"/>	<u>5319712</u>	July 1994	Finkelstein et al.	380/44

ART-UNIT: 237

PRIMARY-EXAMINER: Black; Thomas G.

ASSISTANT-EXAMINER: Homere; Jean R.

ATTY-AGENT-FIRM: Nixon & Vanderhye

ABSTRACT:

The present invention permits the hash of a file to be taken on an incremental basis. It permits any part of the file to be changed while allowing a new aggregate hash to be computed based on the revised file portion and the prior total hash. The aggregate hash is readily updated with each record revision without having to recompute the hash of the entire file in accordance with conventional techniques. These objectives are accomplished using two functions. The first function is an effective one-way hash function "H" for which it is computationally impossible to find two data values that hash to the same result. The second function is a commutative and associative function "F" (and inverse "Finv") and provides a mechanism for combining the aggregate hash and the hash of updated records. Examples of these latter functions include exclusive OR ("XOR") and arithmetic addition. The hash of each file record and the hash of an identification of the record (i.e., a record number or key) are combined using a function ("F") whereby individual records may be extracted using the inverse of that function (Finv). In this fashion, an individual record may be extracted from the aggregate hash and updated. Each record is represented by its identification hashed together with its data content. All such record hashes are added together to provide a highly secure integrity check. This aggregate hash covers the entire database such that the tampering (or rearranging) of any data record is revealed by the use of the record identifier (i.e., record number) in the hash calculation due to its impact on the aggregate hash (e.g., the sum).

13 Claims, 6 Drawing figures

WEST**End of Result Set**☐ **Generate Collection** **Print**

L29: Entry 1 of 1

File: USPT

May 9, 1995

US-PAT-NO: 5414704

DOCUMENT-IDENTIFIER: US 5414704 A

TITLE: Address lookup in packet data communications link, using hashing and content-addressable memory

DATE-ISSUED: May 9, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Spinney; Barry A.	Wayland	MA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Digital Equipment Corporation	Maynard	MA			02

APPL-NO: 8/ 223379 [PALM]

DATE FILED: April 5, 1994

PARENT-CASE:

This application is a continuation, of application Ser. No. 07/964,738, filed Oct. 22, 1992, now abandoned. RELATED CASES The application discloses subject matter also disclosed in the following copending U.S. patent applications, all of which are assigned to Digital Equipment Corporation: Ser. No. 07/964,791, filed Oct. 22, 1992, by Nigel Terence Poole, for "BACKPLANE WIRING FOR HUB IN PACKET DATA COMMUNICATIONS SYSTEM" (PD92-0558); Ser. No. 07/964,792, filed Oct. 22, 1992, by Nigel Terence Poole, for "CROSSBAR SWITCH FOR SYNTHESISING MULTIPLE BACKPLANE INTERCONNECT TOPOLOGIES IN COMMUNICATIONS SYSTEM" (PD92-0559); Ser. No. 07/965,651, filed Oct. 22, 1992, by Bryan Alan Spinney, for "PACKET FORMAT IN HUB FOR PACKET DATA COMMUNICATIONS SYSTEM" (PD93-0012); and Ser. No. 07/969,121, filed Oct. 22, 1992, by Martin Edward Griesmer et al, for "APPARATUS AND METHOD FOR MAINTAINING FORWARDING INFORMATION IN A BRIDGE OR ROUTER" (PD93-0013).

INT-CL: [6] H04 J 3/26, H04 L 12/46, H04 L 12/56

US-CL-ISSUED: 370/60; 370/94.1, 395/400, 395/600

US-CL-CURRENT: 370/389; 707/1, 711/108, 711/216

FIELD-OF-SEARCH: 370/60, 370/85.13, 370/85.14, 370/94.1, 340/825.52, 395/400, 395/600

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected**Search ALL**

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<input type="checkbox"/>	<u>4587610</u>	May 1986	Rodman	395/400
<input type="checkbox"/>	<u>4677550</u>	June 1987	Ferguson	364/300
<input type="checkbox"/>	<u>4680700</u>	July 1987	Hester et al.	364/200
<input type="checkbox"/>	<u>4695949</u>	September 1987	Thatte et al.	364/200
<input type="checkbox"/>	<u>4780816</u>	October 1988	Connell	364/200
<input type="checkbox"/>	<u>4922417</u>	May 1990	Churm et al.	364/200
<input type="checkbox"/>	<u>4933937</u>	June 1990	Konishi	370/85.13
<input type="checkbox"/>	<u>5027350</u>	June 1991	Marshall	370/94.1 X
<input type="checkbox"/>	<u>5032987</u>	July 1991	Broder et al.	364/200
<input type="checkbox"/>	<u>5109336</u>	April 1992	Guenther et al.	395/425
<input type="checkbox"/>	<u>5121495</u>	June 1992	Nemes	395/600
<input type="checkbox"/>	<u>5136580</u>	August 1992	Videlock et al.	370/94.1 X
<input type="checkbox"/>	<u>5197002</u>	March 1993	Spencer	395/400 X
<input type="checkbox"/>	<u>5247620</u>	September 1993	Fukuzawa et al.	395/325

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0522743	January 1993	EPX	
4023527	January 1991	DEX	

ART-UNIT: 263

PRIMARY-EXAMINER: Marcelo; Melvin

ATTY-AGENT-FIRM: Johnston; A. Sidney Dagg; David A.

ABSTRACT:

A way of doing source address and destination address lookups is described, as may be used in a packet data communication system. A way of searching a relatively large database is described, using a combination of programmable hash algorithms, binary search algorithms, and a small content-addressable memory (CAM). The technique is efficient in space, time and cost, compared to prior methods. For example, prior methods using conventional binary reads may have used thirteen reads, whereas this technique requires on average two reads, with a worst case of four reads.

22 Claims, 9 Drawing figures

WEST**End of Result Set**

Generate Collection

Print

L5: Entry 1 of 1

File: USPT

Oct 11, 1994

US-PAT-NO: 5355473

DOCUMENT-IDENTIFIER: US 5355473 A

TITLE: Indexed record locating and counting mechanism

DATE-ISSUED: October 11, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Au; Lawrence	Washington	DC	20009	

APPL-NO: 7/ 718286 [PALM]

DATE FILED: June 20, 1991

INT-CL: [5] G06F 15/40

US-CL-ISSUED: 395/600; 364/974.3, 364/963, 364/960.5, 364/DIG.2

US-CL-CURRENT: 707/3

FIELD-OF-SEARCH: 395/600, 364/419, 364/DIG.1, 364/DIG 2

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>4429385</u>	January 1984	Cichelli et al.	370/92
<input type="checkbox"/>	<u>4468728</u>	August 1984	Wang	395/600
<input type="checkbox"/>	<u>4677550</u>	June 1987	Ferguson	395/600
<input type="checkbox"/>	<u>4774657</u>	September 1988	Anderson et al.	395/600
<input type="checkbox"/>	<u>4914569</u>	April 1990	Levine et al.	395/600
<input type="checkbox"/>	<u>5043872</u>	August 1991	Cheng et al.	395/600
<input type="checkbox"/>	<u>5095458</u>	March 1992	Lynch et al.	364/787
<input type="checkbox"/>	<u>5202986</u>	April 1993	Nickel	395/600

OTHER PUBLICATIONS

D. Knuth, The Art of Computer Programming: "Sorting and Searching", Addison-Wesley .COPYRGT. 1973.
Aho et al., Data Structures and Algorithms, Addison-Wesley .COPYRGT. 1983.
Kruse, Data Structures and Programming Design, Prentice-Hall .COPYRGT. 1984.
Sedgewick, Algorithms, Addison-Wesley .COPYRGT. 1983.

ART-UNIT: 237

PRIMARY-EXAMINER: Lee; Thomas C.

ASSISTANT-EXAMINER: Von Buhr; Maria N.

ABSTRACT:

An indexed record locating and counting mechanism quickly returns time critical information to query mechanisms. The amount of time required to return time critical information is linearly bounded by the length of the sequences of symbols or records requested by the query, allowing massively scaled databases to be manipulated quickly and efficiently on a record by record basis.

1 Claims, 10 Drawing figures

WEST**End of Result Set**☐ **Generate Collection** **Print**

L7: Entry 1 of 1

File: USPT

Apr 5, 1994

US-PAT-NO: 5301319

DOCUMENT-IDENTIFIER: US 5301319 A

TITLE: Data storage audit trail

DATE-ISSUED: April 5, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Thurman; Audree	Phoenix	AZ		
Person; Stanley	Mesa	AZ		
Shelton; Richard	Mesa	AZ		
Norden-Paul; Ronald	Mesa	AZ		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Emtek Health Care Systems, Inc.	Tempe	AZ			02

APPL-NO: 7/ 980135 [PALM]

DATE FILED: November 23, 1992

PARENT-CASE:

This application is a continuation of prior application Ser. No. 07/409,230 filed Sep. 15, 1989, now abandoned.

INT-CL: [5] G06F 15/40

US-CL-ISSUED: 395/600; 364/DIG.2, 364/974, 364/963.3, 364/957.3

US-CL-CURRENT: 707/103R; 707/203

FIELD-OF-SEARCH: 395/600

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

☐ **Search Selected**☐ **Search ALL**

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>3940742</u>	February 1976	Hudspeth et al.	340/172.5
<input type="checkbox"/>	<u>4591974</u>	May 1986	Dornbush et al.	364/200
<input type="checkbox"/>	<u>4611298</u>	September 1986	Schuldt	364/900
<input type="checkbox"/>	<u>4646229</u>	February 1987	Boyle	364/200

ART-UNIT: 236

PRIMARY-EXAMINER: Shaw; Gareth D.

ASSISTANT-EXAMINER: Chaki; Kakali

ATTY-AGENT-FIRM: Warren; Raymond J. Nielsen; Walter W. Bingham; Michael D.

ABSTRACT:

The database is provided with an audit trail for the structure types of the object instances. As a component of an object instance of the database is corrected/changed, the corrected/changed component is substituted for the original component and the original component is linked to the corrected/changed component.

2 Claims, 20 Drawing figures